

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001299**Date Inspected:** 17-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** Office, Lift 3 West, Miscellaneous Metal, Cross**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

**Office**

Sorted and organized project documentation. Discussion with Caltrans Engineer Bill Howe relative to acceptance of Finish coat on Lift 3 East is currently accepted while still in trial assembly area.

**Lift 3 West**

Caltrans QA Lumley and ABF QA Bill Oak performed visual inspection jointly on external surfaces of the Cross Beam bottom plate and exposed bolts and the external vertical surfaces of the FL-3 beams as well as the Side Plates some minor discontinuities were viewed which require touch up via brush painting but the overall appearance and Dry Film Thickness (DFT) were within range specified.

**Miscellaneous Metal**

ZPMC requested a "Final" inspection of (9) Traveler Rail Support Brackets coated with Interfine 979 finish coat. Caltrans QA Lumley checked DFT of coated surfaces and found them to be well in excess of specified maximum requirement, also upon looking underneath the subject brackets the Interzinc 22 coated Faying surfaces were discovered to have Topcoat Interfine 979 contamination upon them. All items were rejected by Caltrans QA Lumley.

**Cross Beam #2**

Inspection of external surfaces of this item revealed that the external Finish coated surfaces adjacent to the connections had Splice plates temporarily bolted to the external surfaces and in direct contact with applied Finish

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## SOURCE INSPECTION REPORT

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coat with no softener devices to protect Finish coated surfaces from damages. Caltrans QA Lumley inquired with ZPMC QC Don Yao Fei as to why no protective devices were installed, he had no explanation.

### Lift 3 East

Internal Inspection and re- inspection of “U” rib stiffener repairs at Panel Point #23 end termination via man-lift end terminations were found to have previously marked up areas amended. Also during internal joint inspection with Caltrans QA Lumley and ABF QA/QC representatives a marking up areas for re-work and repairs ABF QA Bill Oak discovered an arc strike in the base metal of the floor area side plate and notified Caltrans QA Lumley. Dan Hernandez arrived to inspect and map and document arc strike location for pending repairs. ZPMC personnel followed ABF and Caltrans QA Lumley after marking areas in Upper Corner Units for repairs and along Floor area of “T” stiffeners with sandpaper and proceeded to remove the markings allocating and identifying areas for repair. Also concurrent with the inspection process ZPMC personnel arrived and began removal of the bolts affixing the Suspender Brackets to the East side of the Lift thus damaging applied Finish coating on the Suspender Bracket. SMR Skyler Guest was present during this work activity.

### Lift 4 West

ZPMC requested a “Final” inspection for internal ceiling areas and “U” rib stiffeners and Upper Floor beam areas coated with Interzinc 22. Insufficient lighting to perform subsequent inspection was noted and also Internal surfaces were covered in dry-spray and dirt. Caltrans QA Lumley informed ABF of dirt issue as ABF had previously informed QA Lumley of lighting issue, QA Lumley conducted cursory inspection utilizing a flashlight. Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

### Summary of Conversations:

Caltrans QA Lumley inquired with ABF QA Bill Oak as to why ZPMC personnel were removing marks identifying areas for re-work and repairs on internal surfaces of Lift 3 East, Mr. Oak stated he could not explain why such activity was occurring.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang. (858) 699-9549, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Lumley, James	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon, Albert	QA Reviewer

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